Advanced Technology Laboratories

Date: *16-Aug-07*

CLIENT: Department of Toxic Substances Control
Project: 06AT0270
Lab Order: 093579
Contract No: 05-T2888

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
093579-001A	WFCONTROL-Comp/AQ02186	Wood	10/26/2006	8/8/2007	8/16/2007

CLIENT: Department of Toxic Substances Control
Project: 06AT0270
Lab Order: 093579

CASE NARRATIVE

Sample for Fish Bioassay was subcontracted to Associated Laboratory with ELAP Cert.#1338.

DRAFT

DRAFT

LABORATORY WORKSHEET

Lab No. 195233

Date Received: 8/8/07
Date Reported: 8/13/07

FAXED
AUG 15 2007

Report To: Adv Tech Labs

(92) 8228M

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Solid 093579 - 001A (WF Control - Comp AQ0218)

Test Organism Pimephales Promelas Source Thomas Fish Farm Acclimatization 23 Days @ 20 deg. C
Aquaria Volume 10 liters Aquaria Depth 5 inches No. Fish/Concentration 10 Total Chlorine Residual N/D Sample Conductivity 260 µmhos/cm
Organism Characteristics - Length (mm) Min 35 mm Max 45 mm Avg 40 mm Weight (gm) Min 0.46 gm Max 0.66 gm Avg 0.55 gm
Dilution Water - Source Soft Water Hardness - Initial 45 mg/l Final 85 mg/l Alkalinity - Initial 32 mg/l Final 50 mg/l
Aeration Air Control Hardness Initial: 40mg/l Final: 45mg/l Control Alkalinity Initial: 30mg/l Final: 35mg/l Control Conductivity 200 µmhos/cm

Bioassay Conditions	Date Time	Control No.	Control %	Dilution 750 No.	750 %	500 No.	500 %	250 No.	250 %	DUP 750 No.	DUP 750 %	500 No.	500 %	250 No.	250 %
Organisms Surviving	8/9	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	8/10	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	8/11	10	100	9	90	10	100	10	100	10	100	10	100	10	100
	8/12	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	8/13	10	100	9	90	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	11:30	6.6		6.2		6.2		6.2		6.2		6.2		6.2	
	15:00	6.9		7.2		7.0		7.3		7.2		7.0		7.3	
	10:20	7.1		7.4		7.2		7.0		7.4		7.2		7.0	
	11:10	7.3		7.0		7.1		7.2		7.0		7.1		7.2	
	14:20	7.0		7.3		7.5		7.1		7.3		7.5		7.1	
pH / Temp	Start	7.0	19.8°C	7.3	19.8°C	7.5	19.8°C	7.6	19.8°C	7.3	19.8°C	7.5	19.8°C	7.6	19.8°C
	24 Hr	7.1	20.0°C	7.2	20.0°C	7.4	20.0°C	7.5	20.0°C	7.2	20.0°C	7.4	20.0°C	7.5	20.0°C
	48 Hr	7.1	20.2°C	7.1	20.2°C	7.3	20.2°C	7.4	20.2°C	7.1	20.2°C	7.3	20.2°C	7.4	20.2°C
	72 Hr	7.2	20.0°C	7.0	20.0°C	7.2	20.0°C	7.3	20.0°C	7.0	20.0°C	7.2	20.0°C	7.3	20.0°C
	96 Hr	7.2	19.8°C	7.0	19.8°C	7.2	19.8°C	7.3	19.8°C	7.0	19.8°C	7.2	19.8°C	7.3	19.8°C

Results - LC_{50} = >750 mg/l
>750 mg/l
% Survival N/A
Toxicity Units T.U. N/A (TD)

Observation/Remarks ____

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

J
Laboratory Supervisor

8/15

AUG-15-2007 14:19 ASSOCIATED LAB P.01/01

TOTAL P.01

State of California
California Environmental Protection Agency

Department of Toxic Substances Control
Environmental Chemistry Laboratory

ENVIRONMENTAL CHEMISTRY LABORATORY
SAMPLE ANALYSIS REQUEST

1. Authorization Number: 06AT0270

ECL No.: AQ02186 To —

2. Page 1 of 1

3. Requestor: (to Receive Results)
a. Name: Martin Snider
b. Address: 700 Heinz Ave., Suite 100 (street number)
Berkleley, CA 94710 (city, state, zip)
c. Phone: (510) 849-5258 (area code first) d. Fax: (area code first)
e. Email: msnider @dtsc.ca.gov

4. Program/Activity: HWM-RPD

5. TAT Level: 2

*Unit Chief's Signature: *(if TAT level = 1)*

6. Sampling Information:
a. Date/Time Sampled: 10/26/06 (mm/dd/yy)
(#:## AM/PM)
b. Location: EPA ID No.
Site: UCCE Richmond Field Station c/o Steve Quarles
Address: 1301 South 46th Street, Bldg. 478 (street number)
Richmond, CA 94804 (city, state, zip)
GPS-Lat: GPS-Long:
GPS-Alt: GPS-Depth:

7. Codes (select from drop down list or fill in if applicable)
a. Office
b. INDEX
c. PCA 22090
d. MPC
e. SITE
f. County

8. Samples:

a.ID	b. Collector's No.	c. ECL No.	d. Matrix	e. Container Size	f. Number of containers	g. Preservative / Field Information
1	WFCONTROL-Comp	AQ02186	wood	8 oz clear glass jar	1	milled to <2 mm at ECL-Berkeley
2						BM 5/30/07
3						
4						
5						
6						
7						
8						
9						

9. Analysis Requested: Enter sample IDs and sample ID ranges separated by commas. For example, 1-3, 5-7, 9

a. Inorganic Analysis	Sample(s) ID	b. Organic Analysis	Sample(s) ID
Other Metals:			
c. TCLP Analysis		**d. Other Analysis**	
		Fish Bioassay (Title 22, FishBio)	1

FIELD

e. Comments for Multiphasic Samples/Analysis Priority:

10. Analysis Objective: Waste Characterization

11. Detection Limit Requirements: (Check ECL User's Manual to assure default DL is sufficient.)
LC50

12. Supplemental Requests: Enter sample IDs as described in Item 9

Desired Analysis	Sample(s) ID

Initials:
Date:

ECL

13. ECL Lab Remarks: White Fir Control

LAB

14. Chain of Custody:

	Name	Title	Signature	Inclusive Dates of Custody		
a.	Martin Snider	Res. Sci. II	Martin Snider	10/26/2006	to	8/8/07
b.	FPDiaz	Sample control Tech		8/8/07 0930	to	
c.					to	
d.					to	

COC

Department of Toxic Substances Control
Environmental Chemistry Laboratory

SUPPLEMENTAL ☐
(Check if Supplemental Requested)

AUTHORIZATION REQUEST FORM (ARF)

PART A : (By Requestor - PLEASE PRINT)

TAT Level : ☐ 1* ☒ 2 ☐ 3 ☐ 4

Requestor's Name	Martin Snider	Email	msnider	@dtsc.ca.gov	Phone (510) 849-5258
Region	02--Berkeley	Unit			Fax ( )
Back-up Requestor	☐ Tang HWMP-Sacramento HQ				Phone ( )
Site Name	UCCE-Richmone Field Station c/o Steve Quarles				AREA CODE

PART B: Analytical Requests (By Requestor) (Lab uses default methods listed below. Please specify all other requests.)

Inorganic Analysis	Number of Samples/Type: Solid	Liquid	Water	Other
% Dry Solids (ECL730-S)				
Acidity (305-1)				
Alkalinity (310-1)				
Anions by IC (9056)				
Chromium VI(Cr^{6+}) by Colorimetric (7196A)				
Chromium VI(Cr^{6+}) in Water by IC (7199)				
Cyanides for Wastes,Leachates (9010B)				
Hardness (130-2)				
Mercury(Hg) in (Semi)Solid Waste (7471A)				
Mercury(Hg) in Liquid Waste (7470A)				
Metals Scan (6010B, for As,Ba,Cu,Pb, etc)				
Metals Scan (for Drinking water, 6020A)				
OrganoLead in Waste (ECL938-M)				
Particle Size (ECL740-S)				
Perchlorate for Soil,Sludge (ECL955-M)				
Perchlorate for Water (314-0)				
pH (9040B, 9045C)				
Total Dissolved Solids (160-1)				
WET(ECL910-S) ☐ Only if necessary ☑ Do it regardless				
(others, type in)				

Organic Analysis		Number of Samples/Type: Solid	Liquid	Water	Other
GRO (Gasoline, 8015B)					
DRO(Diesel) only (ECL816-M)					
Motor Oil only (ECL816-M)					
DRO(Diesel) & Motor Oil (ECL816-M)					
EthyleneGlycol (ECL772-M)					
PBDEs (ECL750-M)					
PCBs (8082)					
Pesticides - Chlorinated (8081A)					
Pesticides - Organophosphate (8141A)					
1,4-Dioxane (ECL830-S)					
GC/MS	Semivolatiles (8270C)				
	Volatiles (8260B)				
HPLC	Carbonyl Compounds (8315A)				
	Explosives (8330)				
	PAHs (8310)				
Dioxins/Furans by HRGC/HRMS (ECL880-M)					
Flash Point (1020A)					
n-Hexane Extractables/TPH (1664)					
TXO-Total Halogens in Oil (ECL792-S)					
(others, type in)					

TCLP Analysis**					
Metals ☐ Only if necessary ☐ Do it regardless					
Mercury ☐ Only if necessary ☐ Do it regardless					
Volatiles ☐ Only if necessary ☐ Do it regardless					
Semivolatiles ☐ Only if necessary ☐ Do it regardless					
(others, type in)					

Other Analysis					
Fish Bioassay (Title 22)	1				
Congener PCBs (ECL-CG-PCB)					
Congener PBDEs (ECL-CG-PBDE)					
(others,type in)					
(others, type in)					

Analysis Objective: Waste Characterization

Detection Limit Requirements: (Check ECL User's Manual to assure default DL is sufficient.)
STLC, TTLC, T22 LC50

Other Comments: White Fir control

Expected Date of Sample Arrival at Lab 10/26/06 (mm/dd/yy)

PART C : (By SMO - ECL)

Authorization Number (AN) 0 6 A T 0 2 7 0
Lab to Receive Sample(s)

ARF's Revision No. 01
Initials: MS Date: 8/06/07
(new exp. date)

Sample Management Officer (SMO)

Advanced Technology Labs
3275 Walnut Avenue
Signal Hill, CA 90807
Att: Diane Galvin (562)989-4045

ARF's Revision No.
Initials: Date:

☐ Check box if cancelled
Initials: Date:

Today's Date 06/08/07 (mm/dd/yy)

Expiration Date ~~06/18/07~~ 08/18/07 (mm/dd/yy) MS

TAT Level : *1 = 10-15 days (requires unit chief's signature on SAR) 2 = 16 - 30 days 3 = 31 - 45 days 4 = when possible
**TCLP : If time permits and sample matrix type is appropriate, lab may analyze or screen the sample(s) first to determine if TCLP is needed.